```
85
      BY MR. HANAUER:
 1
 2
                Mr. Birla, is Exhibit AB-11 an e-mail
      that a
                          sent to you and others on
 3
      October 3rd, 2016?
 4
                I believe so, yes.
 6
           0.
                And who is Mr.
                           was an early Ripple employee.
 7
           A.
                Mr.
                Does he still work there?
           0.
 8
           A.
                No, he does not.
 9
                                     s role in October
10
           0.
                What was Mr.
11
      2016?
                I don't remember what his role was at
12
           A.
      that period. He had different roles at Ripple.
13
           Q. So do you see how Mr.
                                             writes "We
14
      just had a call with Bitmex (HK-based exchange),
15
      and they are going live with a 20x leveraged
16
      cash-settled XRP/XBT listing today"?
17
           Α.
                I see that.
18
                What -- what was your understanding of
19
20
      what he's referring to by "a 20x leveraged
21
      cash-settled XRP/XBT" listing?
22
           A.
                I don't understand what that means.
23
           Q.
                Do you know what XBT is?
                I do not.
24
           A.
           Q.
                Do you understand that the X -- XRP
25
```

86 could be traded on Bitmex? 1 2 Can you rephrase the question, please? Ο. Yeah. So what was Bitmex? 3 I'm not super familiar with what Bitmex 4 is or was. 6 0. Was it a Hong Kong-based exchange? 7 MR. HECKER: Objection to form; foundation. 8 According to this e-mail, yes. 9 And then do you see how Mr. 10 writes "The spike in price and volume has helped 11 us to pitch exchanges, and it's even sold itself 12 in this case with Bitmex"? 13 Yes, I see that. 14 A. And one of Ripple's goals was to get XRP 15 listed on various digital asset trading exchanges? 16 In -- in my function, for the xRapid/ODL 17 A. product to work, we needed liquidity and liquidity 18 is facilitated by crypto exchanges. And -- and, 19 20 for example, if I wanted to enable my product to 21 facilitate payments in Mexico, it was important to 22 have a Mexican-based exchange that provided 23 liquidity into local fiat and local rail payment 24 services. 25 Q. And in terms of generating liquidity,

- generally being listed on more exchanges is better than being listed on less exchanges?
  - A. I don't know for certain.

- Q. In 2016, Ripple was trying to get -- in order to build liquidity, Ripple was trying to get XRP listed on more exchanges, correct?
- A. In my function, product development for enterprise solutions, I was fixed -- focused on getting liquidity at destinations and origin points to enable a cross-border payment between one currency and another.
- Q. And one of the ways to generate more liquidity was to get XRP listed on exchanges, right?
- A. In my function, it was to get XRP listed on exchanges that were at destinations where my customers wanted to send payments. And -- and building liquidity helped improve the product experience for our customers and that was my product focus.
- Q. And did you understand Mr. to be writing that the spike in XRP's price has helped Ripple get XRP listed on exchanges?
- MR. HECKER: Objection to form.
  - A. Can you rephrase the question, please?

88 So Mr. was writing about the 1 spike in XRP's price helping Ripple get XRP listed 2 on exchanges? 3 That -- can you rephrase the question? Did you understand that Mr. 6 writing about increases in XRP's price helping Ripple to get XRP listed on exchanges? 7 Yes. I understand that he -- he wrote 8 Α. that in this e-mail. 9 Q. And did you agree with Mr. 10 increases in the price of XRP helped rip -- helped 11 12 Ripple get XRP listed on exchanges? I don't believe I had a strong viewpoint 13 A. one way or the other to my knowledge. 14 MR. TENREIRO: This is 15, 15 Nicole. 16 (Whereupon, exhibit is presented 17 and marked SEC Birla Exhibit AB-15 for 18 identification.) 19 20 MR. HANAUER: And I just tendered the witness a document labeled as Exhibit 21 22 AB-15, which has a Bates number ending in 23 2731. 24 BY MR. HANAUER: 25 Q. And, Mr. Birla, is Exhibit AB-15 an

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89
      e-mail chain ending with an e-mail sent from
 1
      Mr. Vias to Mr. Garlinghouse copying you and
 2
      others dated March 3rd, 2016?
 3
           A.
                I see that, yes.
 4
                And I want to refer you to the March 2nd
 5
      e-mail from Mr. Larsen to
 6
      the bottom of the first page of AB-15. Please let
 7
 8
      me know when you're done reading that e-mail.
 9
                (Pause)
                Do you know who
                                                      is?
10
           Q.
                I'm still reading.
11
           A.
                Oh, I'm sorry. Take your time.
12
           Q.
                (Pause)
13
                Do you know who Mr. or Professor
14
           0.
                     is?
15
                I do not believe so.
16
                And Mr. Larsen, Chris Larsen, what was
17
      his role at Ripple in March 2017?
18
                I believe it was either the CEO or
19
20
      chairman.
21
                So do you see how Mr. Larsen writes "Our
22
      currency, XRP, currently trades at approx. .006
23
      U.S. dollars/XRP. As there are 100 billion of
      them, this is not a bad market cap"?
24
25
           A.
                I do see that.
```

```
90
           0.
                What was your understanding of what
 1
      Mr. Larsen is referring to there?
 2
                It sounds like he's referring to the
 3
      market cap of XRP.
 4
                And what's your understanding when he
      refers to XRP as "our currency"?
 6
 7
                     MS. DEARBORN: Object to form.
                I don't know what he means by that.
 8
           A.
                Did you understand him to mean referring
 9
           Q.
10
      to Ripple's currency?
           Α.
                I do not know.
11
12
                     MS. DEARBORN: Same objection.
13
                     MS. ZORNBERG: Court reporter,
            did you get the answer?
14
                     MR. HECKER: It's in the
15
16
            transcript.
      BY MR. HANAUER:
17
                Did anyone else besides Mr. Larsen
18
      ever -- at Ripple ever refer to XRP as our
19
20
      currency or Ripple's currency?
                I do not know for certain.
21
                And then can you please look at the last
22
23
      paragraph on Exhibit AB-15?
24
                And Mr. Larsen writes "While we
      obviously don't control the nominal price of XRP,
25
```

```
91
 1
      we could advocate to the community of
      decentralized validators to increase the nominal
 2
      price with a decrease in the nominal supply"?
 3
           Α.
                I see that.
 4
                What did you understand Mr. Larsen to be
 5
      referring to?
 6
 7
                     MS. ZORNBERG: Objection; lack of
            foundation. I don't think you've even
 8
            asked the witness yet if he remembers the
 9
10
            document --
                     THE REPORTER: I can't hear you.
11
                     MS. ZORNBERG: I don't think you
12
            even asked Mr. Birla if he's familiar with
13
14
            the document or recalls reading it.
      BY MR. HANAUER:
15
           0.
                You can answer the question.
17
                Which -- do you mind repeating the
      question?
18
           Q.
19
                Yeah.
20
                What do you understand Mr. Larsen to be
21
      referring to?
                I don't -- I don't understand what he's
22
23
      referring to.
24
           Q. What's "the community of decentralized
      validators"?
25
```

```
92
 1
                     MS. DEARBORN: Objection to form.
                It's e-mails, you know, out of context.
 2
      I'm not -- I don't know for certain what he's
 3
      referring to.
 4
                In 2017, did Ripple control the supply
           0.
      of XRP?
 6
 7
                     MS. ZORNBERG: Object to form.
                Do you mind rephrasing the question?
 8
           A.
                In 2017, Ripple was the largest owner of
 9
           Q.
10
      XRP, correct?
           A.
                I believe that to be to -- true.
11
12
           Q.
                Was there anyone or anything that owned
13
      close to as much XRP as Ripple did?
                I do not believe so.
14
           A.
                And in 2017, Ripple was increasing the
15
      supply of XRP in the marketplace whenever it sold
      XRP?
17
                Could you define "marketplace"?
18
           A.
                Ripple could increase the supply of XRP
19
20
      available to potential purchasers by deciding to
      sell XRP?
21
                     MR. HECKER: Objection to form;
22
23
            foundation.
24
           A.
                I believe that to be true, yes.
25
           Q.
                So Ripple could decide to increase the
```

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94
 1
      of XR -- okay -- the available supply of XRP to
      potential buyers by going from selling 100 a month
 2
      to 5 a month, is Ripple increasing the supply of
 3
      available XRP or reducing the supply of available
 4
      XRP?
 5
                     MS. ZORNBERG: Object to form.
 6
 7
                Selling 100 XRP per month or selling 5
           A.
      XRP per month increases the supply of XRP to
 8
      purchasers.
9
10
                I'm sorry if I'm not being articulate.
      Let's say Ripple had been consistently selling 100
11
12
      XRP a month, but then starts reducing that to 5
13
      XRP a month going forward.
                Has the supply of XRP Ripple is making
14
      available on a monthly basis gone up or down?
15
                In that case, the amount has decreased
16
           A.
      by -- it was 105, right? 105? It's 95.
17
                Did anyone ever express to you at Ripple
18
      that Ripple could increase the price of XRP by
19
20
      slowing the rate in which it sold XRP into the
      market?
21
           A.
                I do not recall.
22
23
                Could Ripple affect the price of XRP by
24
      changing the rate in which it sold XRP into the
      market?
25
```

- A. I don't know for certain.
- Q. If Ripple decided to sell all its XRP holdings at once, what is your understanding of how that would impact the price of XRP?
  - A. I don't know for certain.
- Q. I mean, you went to business school, right?
  - A. Correct.

1

2

3

4

6

7

8

9

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11

12

13

14

15

16

17

18

- MR. HECKER: Objection to form; argumentative and asked and answered.
- Q. So if Ripple says we're now putting our 50 billion XRP up for sale, do you think that would drive the price of XRP up or the price of XRP down?
- A. I think it would create, you know, uncertainty in the market.
- Q. Do you think the price of XRP would go up in that situation?
- A. Can you rephrase the question, please?
- Q. If Ripple announces that it was selling all of its XRP holdings at once.
- A. I mean, I don't know for certain. I can only speculate.
- Q. What -- what -- what's your -- what do
  you think would happen? What's your understanding

```
96
 1
      of what would happen?
                     MR. HECKER: Object -- objection
 2
 3
            to form; calls for speculation.
                     When you reach a good moment, we
 4
            can take a short break.
 5
                It would -- it would erode liquidity.
 6
      It can potentially erode liquidity. It could
 7
      potentially erode trust.
 8
                     MR. HANAUER: Counsel, I have a
 9
10
            couple more documents on this subject.
            Can I --
11
12
                     MR. HECKER: Let's take a break
13
            if you don't mind. We've been going about
14
            an hour and 15.
                     MR. HANAUER: Sure.
15
16
                     MR. HECKER: Thanks.
17
                     THE VIDEOGRAPHER: The time on
            the video monitor is now 12:03 --
18
19
                     MR. HECKER: Thank you.
20
                     THE VIDEOGRAPHER: -- 12:04 p.m.
            This is the end of Media Unit Number 2.
21
            We're going off the video record.
22
23
                      (Whereupon a recess is taken.)
24
                     THE VIDEOGRAPHER: The time on
25
            the video monitor is now 12:22 p.m. This
```

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97
            is the start of Media Unit Number 3. We
 1
            are back on the video record.
 2
 3
                      (Whereupon, exhibit is presented
            and marked SEC Birla Exhibit AB-18 for
            identification.)
                     MR. HANAUER: I just tendered the
 6
 7
            witness Exhibit AB-18, which is an e-mail
            chain starting on page with the Bates
 8
            number ending in 2161.
 9
10
      BY MR. HANAUER:
           Q. And, Mr. Birla, is Exhibit AB-18 an
11
12
      e-mail chain ending with an e-mail
13
      Mr. Garlinghouse sent to you and others dated
      April 9th, 2017?
14
15
           Α.
                Yes.
16
                And the e-mail Mr. Garlinghouse is
17
      sending you, he's forwarding an e-mail that he
      sent to the board on April 9th, 2017?
18
                I believe that to be correct, yes.
19
20
           0.
                And then if you look at page 2 of the
21
      exhibit, that e-mail chain contains an e-mail that
      Mr. Garlinghouse sent to Mr. Larsen on April 7th,
22
23
      2017?
24
           A.
                I believe that's true, yes.
                And I take it you -- you typically read
25
           Q.
```

- the e-mails Mr. Garlinghouse sends -- sends you?
- A. Ones that I'm cc'd on, you know, it's --
- 3 it's hit or miss, depending on the content. Not
- 4 always.

- 5 Q. But ones Mr. Garlinghouse sends you in
- 6 the "To" line, those you typically read?
- 7 A. Not always.
- 8 Q. What about when Mr. Garlinghouse sends
- 9 you e-mails containing communications he sent to
- 10 the -- sends to the board?
- 11 A. More often than not, I -- I read those.
- 12 Q. Okay. Did you read this e-mail in
- 13 Exhibit 18?
- 14 A. I do not recall.
- Q. Okay. So I want to refer you to the
- 16 e-mail to the board Mr. Garlinghouse forwards you
- on the first page of Exhibit AB-18. In the -- the
- 18 first -- or the third paragraph, he writes "Before
- 19 I dive into some highlights and lowlights, I think
- 20 we will all agree that the most significant Q1
- 21 development came at the end of the quarter in the
- 22 form of a dramatic spike in XRP price and market
- 23 activity."
- 24 A. I see that.
- Q. And the paragraph ends "It's a

```
99
 1
      game-changer for us on a bunch of levels."
                Did Mr. Garlinghouse ever promote XRP
 2
 3
      price increases to the board?
                     MS. ZORNBERG: Object to form.
 4
 5
                     MR. SOLOMON: Object to form.
            Calls for speculation. Objection to form.
 6
 7
            Calls for speculation. Sorry. And lack
            of foundation. I'm sorry.
 8
                     MS. GRESSEL: Could you also
 9
10
            please ask them to distribute the exhibit?
                     MR. TENREIRO: Exhibit 18?
11
12
            Nicole, did you send 18? I thought I
13
            mentioned it.
14
                     MS. GRESSEL: Thank you.
                Can you repeat the question, please?
15
           A.
16
           Q.
                Are you aware of Mr. Garlinghouse ever
17
      promoting XRP price increases to Ripple's board?
                     MS. ZORNBERG: Same objections.
18
                Not to my recollection.
19
20
                Are you aware of Mr. Garlinghouse ever
           Q.
21
      promoting XRP price increases to the public?
                     MS. ZORNBERG: Object to form.
22
23
                Not to my recollection.
24
           Q.
                Are you aware of Mr. Garlinghouse ever
25
      promoting XRP price increases to investors?
```

100 1 MS. ZORNBERG: Object to form. Not to my knowledge. 2 A. Did you understand that Mr. Garlinghouse 3 Q. was communicating to Ripple's board that the price 4 rise in XRP was beneficial to Ripple? 5 MR. SOLOMON: Objection; form. 6 7 Is there a point in the document? A. I read you -- I read you the part where 8 0. he's talking about the dramatic spike in XRP 9 10 price. 11 I believe he mentioned that it's a 12 game-changer. 13 And did you understand him to be saying a game-changer in a beneficial way or a 14 detrimental way? 15 MR. SOLOMON: Objection; lack of 16 foundation, unless he was at the board 17 meeting. 18 Can you just rephrase the 19 20 question, Ben? 21 0. Do you understand my question? 22 If you could rephrase. 23 Do you -- do you understand 24 Mr. Garlinghouse in his e-mail to be describing the price spike in XRP to be beneficial to rep --25

101 1 Ripple or detrimental to Ripple? I don't know for certain and I'm 2 3 speculating that game-changer means positive. 0. And in the second-to-last paragraph on 4 5 the first page of AB-1 [sic], Mr. Garlinghouse writes "And on a more strategic level, holding 6 7 approximately two billion of XRP (based on today's 8 market price) presents opportunities to think strategically about our capital structure (and 9 funding strategy)." 10 A. I read that. 11 12 0. Did you understand Mr. Garlinghouse to 13 be conveying that the price rise in XRP meant more money for Ripple to spend on its operations and 14 product development? 15 MR. HECKER: Objection to form. 16 I'm uncertain if that's what he -- he 17 Α. 18 means by the last paragraph here, page 1. And do you see the paragraph that begins 19 20 "On an operating level, for XRP to serve the 21 purposes of lowering liquidity costs for payments, 22 it needs" to develop -- "it needs deep liquidity 23 across fiat currency pairs"? 24 A. I see that. Do you agree that XRP deep -- needs deep 25 Q.

102 1 liquidity to work for use in effecting cross-border payments? 2 3 MR. HECKER: Objection to form. You can answer. I believe that in -- in the currency 5 pairs and exchanges that are part of the xRapid 6 7 and ODL experience, that deep liquidity against those fiat pairs in destinations and origination 8 points for our customers provides a better 9 10 experience for our customers. Does xRapid or ODL work better if 11 12 there's more liquidity in XRP or less liquidity in 13 XRP? 14 In the amounts you can send and the cost of sending, both are factors for the customer. 15 The liquidity is a strong factor in the experience 16 for both cost to our customer and the amount the 17 customer can send cross border. 18 All right. But here's what I'm getting 19 20 at. From Ripple's perspective, the more liquid the market the XR -- for XRP the better? 21 For -- for xRapid and the ODL products, 22 23 the more liquid those fiat pairs that are part of 24 the XRP experience, that is a better product 25 experience for our customers.

- Q. And then do you see the next sentence in -- in that paragraph, Mr. Garlinghouse writes "Speculative and market trading volume builds that liquidity they are the catalyst to the XRP flywheel"?
  - A. I see that.

- Q. What do you understand Mr. Garlinghouse to be talking about there?
- A. From -- from my vantage point, as part of the xRapid experience, there are two types of liquidity that are on exchanges: One is, you know, Ripple-contracted market making, and the other one on the product side is what we call natural liquidity. And natural liquidity is organic liquidity that's available. And then the Ripple-contracted market makers are -- are -- are liquidity that Ripple contracts for. And those are the two types that are on exchanges. Folks refer to natural liquidity in different terminology. On the product side we call it natural liquidity.
- Q. And speculative trading, is -- that falls into the natural liquidity bucket?
- A. I have in -- in the past heard folks refer to natural liquidity in other terms,

104 1 including speculative liquidity. Okay. And what is your understanding of 2 3 what speculative trading is? MR. SOLOMON: Ben, I'm just going 4 to interrupt you. Are you talking about as used in this e-mail by Brad, or are you 6 7 talking about his personal view separate and apart from this e-mail? I just want 8 to make sure the record is clear on this 9 10 when he answers. MR. HANAUER: Yeah, thanks, Matt. 11 12 The witness's understanding of the term 13 "speculative trading." MR. SOLOMON: Right. But I don't 14 know that he understands. You asked him 15 about Brad's statements in the e-mail. 16 17 Now you're asking about his own understanding. I just want to make sure 18 he's answering your question. 19 20 BY MR. HANAUER: 21 0. What's your understanding of the term "speculative trading" as you would use it? 22 23 My understanding of speculative trading 24 is -- is a catchall for when you don't know. So you don't know -- with cryptocurrency exchanges, 25

105 you don't really know what, you know, folks are on 1 there, you know, trading cryptocurrencies for. 2 And so it's like a catchall definitional portion 3 for that kind of volume and activity. 4 But would you -- is a speculative investor someone that buys XRP with the hope that 6 7 its price will rise? Well, there's different -- in my 8 A. interpretation of speculative, there's different 9 10 reasons why folks would buy additional asset. You just don't know. That's the way that currency --11 12 that's the way that cryptocurrency exchanges work. 13 And there is potential that one reason 14 could be for them speculating or, as you put it, investing, but there could be a whole host of 15 16 other reasons that we don't know that they're 17 buying different digital assets on exchanges. It's, like, unclassified. 18 So when -- when you refer to 19 20 "speculative trading," that includes investors who 21 are purchasing XRP with the hope that its price 22 would rise? 23 MR. HECKER: Objection to form. 24 MR. SOLOMON: Objection. He didn't use the word "investors." 25

106 1 I -- I -- I use it as a catchall when I don't know the purpose. That's by design of how a 2 3 cryptocurrency exchange works, is like there are entities and people on there that you don't know 4 how they -- you know, the reasons they're buying it. They could be buying it to pay for goods. 6 7 They could be doing -- buying it for a cross-border transaction. Or, as I mentioned 8 earlier, it could be contracted. 9 10 Did you have the understanding during the time you worked at Ripple that certain market 11 12 participants would purchase XRP with the hope that 13 its price would rise? 14 Could you rephrase the question, please? 0. Yeah. 15 Since -- since you start -- since you've 16 17 been working at Ripple, has it been your understanding that there are market participants 18 19 who purchase XRP with the hope that its price will 20 rise? 21 A. Yes, I believe that to be true. 22 MR. HANAUER: Twenty-seven. 23 MR. TENREIRO: Twenty-seven, 24 Nicole. (Whereupon, exhibit is presented 25

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107
            and marked SEC Birla Exhibit AB-27 for
 1
 2
            identification.)
                     MR. HANAUER: And I'm tendering
 3
            the witness a document labeled as Exhibit
 4
            AB-27, which has a Bates number ending in
 6
            2337.
      BY MR. HANAUER:
 7
                And, Mr. Birla, is Exhibit AB-27 an
 8
           0.
      e-mail chain ending with an e-mail that you sent
 9
                           and others on December 22nd,
10
      2017?
11
12
           A.
                Yes, I believe so.
13
           Q.
                And
                                       she works at the
14
15
           A.
                At this period, I believe so.
                And on Exhibit AB-27, Ms.
16
      e-mailed you on December 22nd, 2017, she writes
17
      "Hi, Asheesh, sharing a suggested RT if you're up
18
      for it. Brad tweeted out a chart from
19
20
      today with the headline 'Bitcoin is so 2017 as
      Ripple soars at year-end: Chart' and we suggest
21
22
      you RT with comment to amplify engagement."
23
           A.
                I see that.
                                       writes "RT," did
24
           Q.
                So when Ms.
      you understand that to mean retweet?
25
```

```
108
 1
           A.
                Yes, I did.
                And she's referring to a tweet that
 2
           0.
      Mr. Garlinghouse had made?
 3
           A.
               I believe that's true, yes.
 4
                And the tweet Mr. Garlinghouse made was
      referring to the price rise in XRP?
 6
 7
                Well, I -- I don't have the article,
      but -- I don't have the article that -- that it's
 8
      referring to to completely understand the context
 9
10
      of the tweet.
           Q. Okay. Whatever Mr. Garlinghouse
11
12
      tweeted, Ripple's PR agency was asking you to
13
      retweet it?
                I believe that to be true, yes.
14
                Do you know if you retweeted
15
           0.
      Mr. Garlinghouse -- Garlinghouse's tweet?
16
           A.
                I do not recall.
17
                Did Mr. Garlinghouse ever make tweets
18
      about XRP price increases that you're aware of?
19
20
           Α.
                Not that I'm aware of.
21
                Did you ever tweet about XRP price
22
      increases?
23
           A.
                I don't know for certain.
24
           Q. Okay. You can put that exhibit away,
25
      please.
```

So how would you describe the term "liquidity" as it relates to XRP?

A. So XRP, like other digital assets, bitcoin and Ethereum and Litecoin and -- are examples, are traded on cryptocurrency exchanges, decentralized ones or centralized ones. And on these cryptocurrency exchanges, there are order books. And order books are -- are matching buy and sell orders. And -- and they have amounts. So, you know, the amount of sell, the amount of buy.

If you add up the order book within a certain band around a midpoint of -- of a market price, that's known as depth of liquidity. And the deeper the depth of liquidity just means that around the market price, there are more orders put in for that given currency.

- Q. Does a more liquid market generally mean a tighter spread between the bid and the ask?
- A. I don't know for certain. There are cases where that isn't true, but I believe there are cases where that's -- that's true as well.
- Q. But is it generally true that in a more liquid -- the more liquid the market is, the tighter the bid/ask spreads are?

A. It's -- yeah, I don't know for certain, but generally a deeper order book and deeper liquidity provides a better experience for our products and the bid -- the bid/ask is what's known as a tighter bid -- bid/ask.

- Q. So a tighter bid/ask, that's better for Ripple because it makes its customer experience better?
- A. To my knowledge, most of the time, not all -- always, but most of the time a tight bid/ask provides better rates for our customers and a deeper -- a tight bid/ask with a deeper liquidity pool not only provides good rates, but it enables customers to send more in notional volume.
- Q. And -- and generally a tighter bid/ask spread is reflective of a more liquid market?

  MS. ZORNBERG: Object to form.

  You can answer if you understand.
- A. I don't know for certain. I've seen exceptions to that, but it is my understanding in general that a tighter bid/ask is correlated with deeper liquidity pool around that asset.
  - Q. And when you say "deeper liquidity

pool," that's the same thing as more liquid?

- A. The definition that I provided earlier is the one that I go off of, meaning that at a given change, liquidity is measured at the point of an exchange. So you're referring to -- or, you know, one would refer to a deep liquidity pool between bitcoin or XRP and the Mexican peso.

  And -- and the more orders around the midpoint would be a deeper liquidity pool.
- Q. Right. And I just want to make sure we're on the same page. When you're talking about a deeper liquidity pool, that means more liquidity, right?
- A. In my definition, I believe that to be true. And to clarify, there are local minimum and maximums. And so it's important to note that the liquidity is measured at the local point, meaning against -- at a given exchange and against a given pair at that exchange.
- Q. And when Ripple measured liquidity, however it did, the more liquid the pool was, the better Ripple's products operated?
- A. To be specific, in my role, my products measure liquidity at local maximums and local minimums. So that means that if we were

- facilitating an ODL or xRapid payment between U.S.
- and Mexico, we measure liquidity at the U.S.
- 3 dollar to XRP order book and then the -- and then
- 4 the XRP to Mexican peso order book. And that's
- 5 how we measure liquidity for our products, the
- 6 enterprise products.
- 7 Q. And the way you measured liquidity, as
- 8 you just described it, the more liquid a currency
- 9 pairing was, the better Ripple's product operated?
- 10 A. In that given jurisdiction and -- and
- 11 locality, in general, that was true. There was
- 12 exceptions. There are things called a -- a
- 13 reversed order book that causes exceptions to that
- 14 rule. But, in general, that, to my knowledge, is
- 15 true.
- 16 Q. And since the time you started at
- 17 Ripple, one of Ripple's goals has been to increase
- 18 the liquidity of XRP on digital asset exchanges?
- A. Can you rephrase the question, please?
- Q. So I'm just talking about since the time
- 21 you started working at Ripple, one of Ripple's
- goals has been to increase the amount of liquidity
- of XRP on the exchanges it trades on?
- A. Specifically as it pertains to my role
- and the products that I work on, it's a

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combination of exchanges that are enabled by xRapid -- I'm sorry, the other way around -- exchanges that are part of the xRapid experience. Having good ample liquidity at those exchanges is important, but another factor that goes into it is the amount the customer wants to send.
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So, for example, if a customer wants to send a million dollars between U.S. and Mexico, there needs to be at least \$1 million of liquidity depth at the -- at both exchanges, the sending exchange and the receiving or destination exchange. Often 2x the amount and 3x even better in a number of circumstances, but not always true.

- Q. And because of the importance of liquidity to the way Ripple's products operate, one of the things you and your -- your team would work on would be to increase the liquidity of Ripple -- or of XRP on those exchanges?
- A. So to be specific, I -- I believe that if a customer wanted to send payments into the Philippines, then it was important for the Philippines exchange to be part of the xRapid experience and for there to be liquidity at the destination Filipino exchange. And the same thing at the sending exchange as well, that it's part of

114 1 the xRapid experience. So in order to make that happen, Ripple, 2 3 as a company, made efforts to increase the liquidity on the -- both domestic exchanges XRP 4 traded on and the foreign exchanges XRP traded on? And to be specific, the foreign and 6 7 destination exchanges that were part of the xRapid experience. In often cases, there are multiple 8 exchanges at the destination. 9 10 So, for example, in the Philippines, there are three crypto exchanges in the 11 12 Philippines, but only one is part of the Ripple --13 ODL experience. 14 Q. Right. So since you started working at Ripple, 15 16 Ripple made efforts to increase the liquidity of 17 XRP on the exchanges that Ripple needed to utilize to make its products work, right? 18 Sometimes there are ample -- there's 19 20 ample volume already known as natural liquidity. 21 That's often the case at the larger sending exchanges such as Bitstamp. It's a very deep 22 23 order book, as they call it, or depth of 24 liquidity. But the reverse is often true in 25

115 1 emerging markets. And so providing more liquidity in emerging markets was often needed to provide a 2 proper and excellent product experience to our 3 customers. 4 Needed by Ripple? 0. Well, by our customers. So the 6 7 customers, if they want to send a million dollars into the Philippines, need over a million dollars 8 of liquidity at that destination for a good 9 10 product experience. 0. Right. 11 12 So to make sure that Ripple's customers 13 had a good product experience, Ripple made efforts 14 to increase the liquidity on the target -- the foreign exchanges that Ripple used to make its 15 products work? 16 17 Not always, but, you know, on a case-by-case basis, that is correct, to my 18 19 knowledge. 20 (Whereupon, exhibit is presented and marked SEC Birla Exhibit AB-8 for 21 identification.) 22 23 MR. HANAUER: And for those on 24 Zoom, we're going to Exhibit 8. And I tendered the witness exhibit -- a document 25

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116
            labeled Exhibit AB-8, which begins with
 1
            the Bates number ending in 4717.
 2
      BY MR. HANAUER:
 3
                Mr. Birla, is Exhibit AB-8 an e-mail
 4
                   sent to you and others dated February
      that
      19th, 2016, and the attachment to that e-mail?
 6
 7
           A.
                It appears so, yes.
                And who -- who's
           0.
 8
           A.
                        was an early employee at Ripple.
 9
                Is he still there?
10
           0.
           A.
                I don't believe so.
11
                What did he -- what did he do?
12
           Q.
13
           A.
                He held a number of roles during his
      tenure at Ripple, from integration expert to
14
      technical architect. I don't -- I don't know the
15
      full range of responsibilities he had during his
16
17
      tenure.
           Q. And do you see the subject line of
18
               e-mail is "XRP Bridge Currency Papers"?
19
20
           A.
                Yes, I do see that.
21
                And what's your understanding of the
      term "bridge currency" as it relates to Ripple's
22
23
      business?
24
                So as I understand it, when you have two
      counterparties -- so a counterparty is a trusted
25
```

117 1 corporation and a financial institution -- they issue customers, retail people, something called 2 on IOU. But they're the counterparty. So, for 3 example, if you bank at Bank of America, Bank of 4 America would be the counterparty. And then on 6 the receiving end, you have another counterparty. Let's just say it's Santander Bank in -- in 7 Mexico. And a bridge currency for a neutral 8 decentralized digital asset like XRP is helpful so that both counterparties don't have to have trust 10 with each other. 11 12 0. So when Ripple uses XRP in its ODL 13 product to convert dollars to pesos, is XRP acting as the bridge currency? 14 15 I believe so, yes. writes in his And do you see how Mr. 16 e-mail "Ripple must make a concerted effort to 17 establish XRP as a bridge"? 18 19 I'm reading that, yes. 20 0. Would -- would you agree with that statement as of February 2016? 21 22 MS. ZORNBERG: So object to form. 23 Are you asking him did he review this 24 document at the time and did he in 2016, when he reviewed it, agree with the 25

118 1 statement? Or looking at it now, regardless of familiarity, does he agree? 2 BY MR. HANAUER: 3 Just as -- as you think back to 2016, 4 0. did Ripple need to make a concerted effort to establish XRP as a bridge currency? 6 7 To -- to my knowledge, that wasn't the A. focus of -- of product. And in 2016 I was leading 8 product and my concerted effort was around solving 9 10 customer pain points. And if a customer pain point was resolved and it removed friction by 11 12 using XRP as a bridge currency, then we used XRP 13 as a bridge currency. If it didn't, then we used another solution or another feature. So it really 14 depends on -- the concerted effort was around 15 16 focusing on the customer and solving their pain 17 points and removing friction from their 18 experience. So Ripple currently uses XRP as a bridge 19 20 currency in its ODL product, correct? Α. 21 That is correct. Do other companies use bridge -- XRP as 22 23 a bridge currency in other cross-border payment 24 systems that they sell to customers? Can you rephrase the question, please? 25 A.

- Q. So Ripple uses XRP in the cross-border-payment platform that it sells to its customers?
  - A. That's correct.

- Q. Do other companies sell cross-border-payment platforms to customers that use XRP as a bridge currency?
- A. To my knowledge, there are other customers and developers that leverage the XRP ledger to convert from one currency to another currency. And if you leverage the XRP ledger to convert from one currency to another currency, there's a feature in the XRP ledger called auto bridging or pathfinding or a combination of auto bridging and pathfinding. And in those cases it's my -- it's my belief that they bridge through XRP when it improves the product experience or provides a better rate to the customer or makes an illiquid asset liquid.

and that's not a core part of my job to -- to look at the XRP ledger, I don't know all the different use cases, but I do know that the XRPLDex and auto bridging and pathfinding to my knowledge are -- are leveraged for developers and companies outside

of Ripple.

- Q. So what other companies besides Ripple offer customers a cross-border-payment platform that uses XRP as the bridge currency?
- A. I don't track all the developers. It's open, it's decentralized. And part of the beauty of an open and decentralized open-source system is that often I learn about these things secondhand. For example, someone Tweeting that they developed an application on top of the XRP ledger. So I don't actively keep track of all the different use cases and companies and nor do we know of the entities of a lot of them given the open source is decentralized.
- Q. So who are Ripple's competitors that sell cross-border payment systems that use XRP as a bridge currency?
- A. I don't -- so xRapid and -- and ODL are offered in only a few jurisdictions right now.

  They don't cover all currencies available, so I don't know who is competing with the ODL value proposition.

Secondly, the market is massive. So I don't -- I don't view anyone coming into the ecosystem as a competitor. For example,

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121
 1
      there's -- there are folks going after SME
      payments, which are -- SME stands for small
 2
      businesses. Small-, medium-sized enterprises.
 3
      There's other folks going after e-commerce. So, I
 4
      mean, I wouldn't call those competitors to --
      to -- to Ripple's products.
 6
 7
                And, again, like the -- the payment size
      is in the trillions and there's more than enough
 8
      room for a lot of folks to integrate.
 9
10
           0.
                Right.
                But can you name another company today
11
12
      that offers a cross-border remittance product that
13
      relies on XRP as the bridge currency?
14
                I -- I don't know a name.
                Okay. And would ODL exist today if not
15
      for the efforts of Ripple?
16
                     MS. ZORNBERG: Objection.
17
                Can you rephrase the question, please?
18
           A.
                ODL is currently Ripple's primary
19
20
      cross-border payment product, correct?
                It is one of our main product lines for
21
           Α.
      cross-border payments.
22
23
                And you were responsible for developing
24
      that product, right?
25
           A.
                My team was responsible for that, yes,
```

122 1 correct. 2 And you and your team put in a lot of Q. work over many years to get ODL to the point where 3 customers were using it, right? 4 Yeah. We -- we spend a lot of time with 6 customers and getting their feedback and using that feedback for product improvements around not 7 only ODL and xRapid, but RippleNet as -- as a 8 whole. 9 And ODL was a product that Ripple 10 developed, right? 11 12 A. Yes. 13 So would anyone be using ODL today if Ripple didn't exist? 14 Well, the product was developed -- ODL 15 was developed by Ripple. So the -- I believe the 16 answer is no. 17 Did you read the papers attached to 18 19 s e-mail? 20 A. I don't believe so, no. Can you -- you can put that exhibit 21 22 away. 23 A. This one? 24 Q. Yeah. Thank you. 25 MR. HANAUER: We're at a pretty

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123
            logical stopping point. Would anybody
 1
 2
            object if we took lunch now?
                     Let's go off the record, please.
 3
                     THE VIDEOGRAPHER: Please stand
 4
            by. The time on the video monitor is now
 5
            1:05 p.m. This is the end of Media Unit
 6
 7
            Number 3. Please stand by as we go off
            the video record.
 8
 9
                     (Whereupon, a luncheon recess is
10
            taken.)
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
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124
 1
               AFTERNOON SESSION
                    THE VIDEOGRAPHER: The time on
 2
           the video monitor is now 1:50 p.m. This
 3
            is the start of Media Unit Number 4. We
 4
            are back on the video record.
      BY MR. HANAUER:
 6
 7
               Mr. Birla, was there a time that Ripple
          0.
      gave away XRP for free?
 8
 9
          A.
               I believe so, yes.
10
          0.
               When was that?
               I don't recall the exact date. Yeah, I
11
12
      don't -- I don't recall the exact dates.
13
          Q. Do you recall the last time Ripple gave
      away XRP for free?
14
15
          Α.
               I -- I do not.
16
           Q.
               Why was Ripple giving away XRP for free?
               I don't quite understand all the
17
          A.
      dynamics behind why Ripple was giving away XRP.
18
               Who were the type of recipients that XRP
19
20
      was -- or that Ripple was giving XRP to for free?
               I -- I don't know for certain, but from
21
      my recollection, I remember developers being one
22
23
      constituent or group.
24
          0.
               Traders?
               I don't know for certain.
25
          Α.
```

125 1 0. Investors? I don't know for certain. 2 A. 3 Q. When Ripple gave away XRP for free, did it place restrictions on what the recipient could 4 do with the XRP? 5 Α. I do not recall. 6 7 So we talked a little bit earlier this 0. morning about the term "speculator" or 8 "speculative trading." 9 10 And can you just remind me, what was your understanding of -- of that terminology? 11 12 A. In the product sense, there are -- in 13 relation to ODL, there are two types of constituents or groups that provide liquidity. 14 There are contracted market makers and there are 15 natural liquidity providers. And natural 16 liquidity providers are largely unknown, but 17 18 the -- that liquidity is organic to the exchange 19 and to the depth of liquidity. It adds to the 20 depth of liquidity at an exchange. 21 0. So the natural liquidity providers were those participants that traded XRP on exchanges, 22 23 right? 24 MS. ZORNBERG: Object to form. 25 A. I believe so, yes.

Q. So when the terminology "speculative trading" or "speculators" was used at Ripple, you understood that to mean those trading XRP on digital exchanges?

MR. HECKER: Objection to form.

- A. I understood that to be similar to my definition of natural liquidity providers.
- Q. And I believe you mentioned that Ripple did not know who the speculators were or what their motivation was for trading XRP?

MS. ZORNBERG: Objection to form.

- A. Can you rephrase the question, please?
- Q. "Speculators" or "speculative trading," as that term was referred to at -- at Ripple,
  Ripple did not know why those speculators were trading in XRP, correct?

MR. HECKER: Same objection.

- A. The contracted market makers for the most part are known entities. The natural liquidity participants, it is correct, they're largely unknown to -- to Ripple.
- Q. But you had mentioned that while the speculators were largely unknown to Ripple, you understood that at least some speculators were trading XRP with the hope of profiting off it?

127 1 MR. HECKER: Objection to form; foundation. 2 3 It is unknown what -- what the natural liquidity participants' use case was or is. One 4 of those use cases could be investments. And you understood that there were 6 7 certain market participants that were, in fact, investing in XRP with the hope that its price 8 would rise? 9 10 MR. HECKER: Objection to form. I do understand that at least some of 11 12 the market -- natural liquidity market 13 participants, their use case was investment. Did Ripple do anything to investigate 14 the speculative traders to find out what they were 15 doing with the XRP they were trading? 16 MS. ZORNBERG: Object to form. 17 To my knowledge, similar to open source 18 and the decentralized nature of the product and --19 20 and the ecosystem, developers, traders, other 21 constituents, users, are unknown to the larger 22 community and that's the nature of open and 23 decentralized technology. 24 Did rip -- Ripple make efforts to figure out who was trading in XRP? 25

128 1 A. Not to my knowledge. Did Ripple make efforts to restrict how 2 0. 3 the people trading XRP on exchanges could use their XRP? 4 MR. HECKER: Objection to form. Could you rephrase the question? 6 7 Did Ripple ever make efforts to restrict Q. how those trading XRP on exchanges could use the 8 XRP that they purchased? 9 10 Not to my knowledge. During your time at Ripple, has Ripple 11 0. 12 ever encouraged or promoted the investing in XRP? 13 MS. ZORNBERG: Object to form. I don't recall. 14 A. Did Ripple sell XRP to investors? 15 0. 16 A. The -- today to my knowledge, the 17 primary sale of XRP is of for use in the products. So ODL customers to my knowledge are the primary 18 counterparty in a sale of XRP, to my knowledge. 19 20 0. Since 2016, has Ripple sold XRP to investors? 21 22 A. Can you --23 MS. ZORNBERG: Object to form. 24 A. Can you rephrase the question, please? Do you understand that since 2016, 25 Q.

```
129
 1
      Ripple has from time to time sold XRP to
      investors?
 2
                     MS. ZORNBERG: Object to the term
 3
            "investor." Investor in Ripple? Investor
            in some other broader sense?
                     MR. HANAUER: Investors in XRP.
 6
 7
                I don't know other than the customers
           A .
      that have purchased XRP for use in our product,
 8
      ODL. To my knowledge, I'm not aware of who the
 9
10
      company has sold XRP to.
                Are you aware that Ripple has sold XRP
11
12
      directly to hedge funds?
                I do not recall.
13
           A.
                Do you understand that Ripple has sold
14
      XRP to institutional investors?
15
           A.
                I do not recall.
16
17
                Do you understand that there's a
      community of retail investors in XRP?
18
                     MS. ZORNBERG: Object to form.
19
20
                     You can answer.
21
           A.
                Yes, I believe so.
                Do you have an understanding of whether
22
23
      more people are trading in XRP for investment
24
      purposes as opposed to other purposes?
25
                     MR. HECKER: Objection to form.
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